

Supplementary Table S1. Baseline characteristics of Cinacalcet- and Etelcalcetide-treated cohorts, Post PSM

| | Cinacalcet- treated cohort N=432 | Etelcalcetide-treated cohort N=432 | P-value |
|--|---|---|----------------|
| Age at the index-date, mean (SD) | 63.7 (15.0) | 64.4 (14.5) | 0.530 |
| Male, n (%) | 270 (62.5) | 276 (63.9) | 0.672 |
| CCI, mean (SD) | 1.1 (1.1) | 1.1 (1.1) | 0.877 |
| Co-morbidities/clinical manifestations | | | |
| Diabetes mellitus, n (%) | 99 (22.9) | 93 (21.5) | 0.623 |
| Hypertension, n (%) | 336 (77.8) | 323 (74.8) | 0.299 |
| CVD, n (%) | 60 (13.9) | 56 (13.0) | 0.690 |
| Fractures, n (%) | 4 (0.9) | 4 (0.9) | 1.000 |
| Hypercalcemia, n (%) | 0 (0.0) | 0 (0.0) | - |
| Parathyroidectomy, n (%) | NI | 0 (0.0) | 0.317 |
| Malignant tumors, n (%) | NI | 5 (1.2) | 0.477 |
| Hypocalcemia, n (%) | 0 (0.0) | 0 (0.0) | - |
| Treatments | | | |
| ACE inhibitors, n (%) | 129 (29.9) | 96 (22.2) | <0.050 |
| Sartans, n (%) | 90 (20.8) | 103 (23.8) | 0.288 |
| Beta Blockers, n (%) | 233 (53.9) | 229 (53.0) | 0.785 |
| Calcium supplementation, n (%) | 43 (10.0) | 40 (9.3) | 0.729 |
| Phosphorus binders, n (%) | 277 (64.1) | 292 (67.6) | 0.282 |
| Vitamin D in active form, n (%) | 110 (25.5) | 109 (25.2) | 0.938 |
| Vitamin D in inactive form, n (%) | 270 (62.5) | 254 (58.8) | 0.265 |
| ESA, n (%) | 339 (78.5) | 351 (81.3) | 0.309 |
| Prednisolone and other steroids, n (%) | 54 (12.5) | 53 (12.3) | 0.918 |
| Anti-osteoporotic medications, n (%) | 6 (1.4) | 5 (1.2) | 0.762 |

NI (not issuable).

Supplementary Table S2. Baseline characteristics of Cinacalcet- and Etelcalcetide-treated naive patients, Post PSM (1:2)

| | Cinacalcet- treated cohort N=552 | Etelcalcetide-treated cohort N=276 | P-value |
|--|---|---|----------------|
| Age at the index-date, mean (SD) | 65.2 (14.3) | 65.4 (14.7) | 0.821 |
| Male, n (%) | 340 (61.6) | 177 (64.1) | 0.477 |
| CCI, mean (SD) | 1.2 (1.2) | 1.1 (1.1) | 0.751 |
| Co-morbidities/clinical manifestations | | | |
| Diabetes mellitus, n (%) | 165 (29.9) | 71 (25.7) | 0.211 |
| Hypertension, n (%) | 432 (78.3) | 213 (77.2) | 0.722 |
| CVD, n (%) | 86 (15.6) | 41 (14.9) | 0.785 |
| Fractures, n (%) | 8 (1.4) | NI | 0.668 |
| Hypercalcemia, n (%) | NI | 0 (0.0) | 0.479 |
| Parathyroidectomy, n (%) | NI | 0 (0.0) | 0.479 |
| Malignant tumors, n (%) | 9 (1.6) | NI | 0.283 |
| Hypocalcemia, n (%) | 0 (0.0) | 0 (0.0) | - |

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|--|------------|------------|-------|
| Treatments | | | |
| ACE inhibitors, n (%) | 176 (31.9) | 72 (26.1) | 0.086 |
| Sartans, n (%) | 122 (22.1) | 67 (24.3) | 0.482 |
| Beta Blockers, n (%) | 264 (47.8) | 148 (53.6) | 0.116 |
| Calcium supplementation, n (%) | 50 (9.1) | 22 (8.0) | 0.601 |
| Phosphorus binders, n (%) | 323 (58.5) | 154 (55.8) | 0.456 |
| Vitamin D in active form, n (%) | 166 (30.1) | 75 (27.2) | 0.387 |
| Vitamin D in inactive form, n (%) | 327 (59.2) | 162 (58.7) | 0.881 |
| ESA, n (%) | 455 (82.4) | 233 (84.4) | 0.471 |
| Prednisolone and other steroids, n (%) | 68 (12.3) | 36 (13.0) | 0.767 |
| Anti-osteoporotic medications, n (%) | 8 (1.4) | 4 (1.4) | 1.000 |
| NI (not issuable). | | | |